ARO-FE Executive Bulletin

June 6, 2000

- 1. Quarterly Report: The ARO-FE publishes a Quarterly Report which is distributed via ARO-FE web page: http://www.arofe.armu.mil/index.html. The Quarterly Report is accessed using the password "xxxxx".
- 2. ARO-FE Web Page also includes "detailed" reports (# of reports) on: <u>Environmental Quality Technology</u>: Surface Treatment (1); <u>Electronics</u>: Semiconductors (23), Communications (5), Other Topics (4); <u>Materials Science</u>: Ceramic Conposites (8), Metal Alloys (6), Other Topics (5); and <u>Other S&T</u> (3). These technical reports/information are inserted in the Web Page, as they become available.
- 3. Desktop News: An open web and network broadcast platform which displays a tickertape across the top of the computer screen delivering headlines of our activities. It offers an easy and effortless access to the ARO-FE past, present and planned technical activities and it includes hot links to many other Research organizations within DOD. DTN can be downloaded to your computer by clicking on: http://www.DesktopNews.com/Download/AroSetup.exe
- 4. The following are <u>some</u> of the ARO-FE highlights:

Visitors:

- Mr. Bruce C. Bade, Director of Pacific Armaments Cooperation (Office of the Secretary of Defense)
- Dr. Jacques S. Gansler (Under Secretary of Defense for Acquisition and Technology, DOD)
- Mr. Thompson (Deputy Under Secretary of the Army for International Affairs)
- RADM Gaffney, Chief of Naval Research, and CAPT Ryan, CO ONR-IFO
- BG Philip M. Mattox, Director Logistics, Engr, and Security (J4) United States Pacific Command
- Support to DOD Labs
 Gathered information on GaN semiconductor research in Japan and sent to scientists at ONR, ARL, and AF RL.
 GaN research includes material growth, lasers for the next generation optical storage system, LEDs, solar blind
- Assisting ARL, Dr. Semendy, in obtaining AlGaN from Professor Onabe of Tokyo University.
- Gathered information on Asian research on nonthermal plasmas for pollution reduction (Dr. Skatrud of ARO).

detectors, and wide-bandgap electronics. All of these areas are intensely pursued by many DOD scientists.

- Assisted NIST and NSF in promoting the understanding and acceptance of the New Collaborative Project, a
 US-Japan optoelectronics project designed to follow the US-Japan Joint Optoelectronics Project (JOP), in
 Japan. Completed report on findings.
- Investigating possible ARO-FE / ARL (Dr. James McCauley) funded Japanese research project on functionally graded materials for Armor application.
- Gathering information on Japanese researchers working in the area of high velocity impact damage on ceramics, and identifying researcher to help organize a workshop in the Pacific Rim.

Conference Support

- Symposium on Energy Engineering in the 21st Century, Hong Kong
- Functionally Graded Materials in the 21st Century, Japan
- Conf. on Mesomechanics for Development of Science and Technology, China
- 22nd Symposium on Rarefied Gas Dynamics, Australia
- Photonics Taiwan 2000, Taiwan
- Bulk Metallic Glasses (Bulk Amorphous Alloys), Singapore
- Advanced Research Workshop on Semiconductor Nanostructures, New Zealand

Site Visits

- Melbourne: Monash University; the Cooperative Research Centre for Advanced Composite Structures Ltd. and the Department of Defence Science and Technology Organization.
- Singapore: The National University of Singapore (NUS); Institute of Materials Research & Engineering (IMRE); and the DSO National Laboratories.
- Thailand: The National Science and Technology Development Agency (NSTDA) and the Metals and Materials Technology Center (MMTC).
- 5. ARO-FE Organization consists of a Director, Associate Director, two part-time Japanese Scientists and a Japanese Administrative Assistant. The Japanese Government funds the Japanese personnel.
- 6. Please direct your questions to: Dr. Giuliano D'Andrea, Ph.D., Director ARO-FE, dandreag@arofe.army.mil.